

FORT MCKINLEY,

HAER No. ME-59-G

BATTERY WEYMOUTH COMBINED OVSRVATION STATION

On west side of East Side Drive approximately 125 feet

south of Weymouth Way on Great Diamond Island

Portland

Cumberland County

Maine

HAER  
ME  
3-PORT,  
27G-

#### PHOTOGRAPHS

#### WRITTEN HISTORICAL AND DESCRIPTIVE DATA

#### HISTORIC AMERICAN ENGINEERING RECORD

National Park Service

Northeast Region

Philadelphia Support Office

U.S. Custom House

200 Chestnut Street

Philadelphia, P.A. 19106

HAER  
ME  
3-PORT,  
276-

**HISTORIC AMERICAN ENGINEERING RECORD  
FORT MCKINLEY,  
BATTERY WEYMOUTH COMBINED OBSERVATION STATION**

**HAER No. ME-59-G**

**Location:**

On west side of East Side Drive approximately 125 feet south of  
Weymouth Way on Great Diamond Island  
Portland, Cumberland County, Maine

UTM: 19.403990.4836810

Quad: Portland East, ME, 1:24,000

**Date of Construction:**

1905 and 1909

**Architects & Engineers:**

Army Corps of Engineers

**Present Owners:**

McKinley Partners Limited Partnership

**Present Use:**

Vacant

**Significance:**

Fort McKinley attains significance as the largest of Portland Harbor's five military complexes built in the late 19th and early 20th centuries. The fort protected Maine's principal city with one of the most well-defended harbors in the country. Battery Weymouth Combined Observation Station is one of seven such stations built at Fort McKinley between 1905 and 1909 to control and monitor gun fire from the fort's large batteries.

**Project Information:**

This is one of nine structures at the fort to be documented in accordance with the Memorandum of Agreement of 1989 as a mitigative measure prior to partial demolition of the structure.

Christine S. Beard  
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10 Barr Street  
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## SITE

Fort McKinley occupies the northern half of Great Diamond Island in Maine's Casco Bay and is a part of the City of Portland. The Battery Weymouth Combined Observation Station is located on the South Fork of the island within bounds of Fort McKinley. It is set back from the road in a wooded area on the west side of East Side Drive, approximately 125' south of Weymouth Way.

## DESCRIPTION

The Battery Weymouth Combined Observation Station is in very poor condition, the entire addition having completely collapsed. The building was constructed in two sections, the earliest being a square structure in the northeast corner that was constructed in 1905. The remainder was added in 1909.

The earlier section measures roughly 16' square. It is partially set into a manmade hillside so that it is fully exposed at the south side but only the upper half is visible from the north side. Walls of the 1905 section are constructed of brick at the south and west elevations. The lower portion of the north and east elevations is also brick while the upper half is poured concrete. The building rests on a concrete foundation. Fenestration consists of a central doorway at the south elevation and one window centered on the west elevation. There is also a single long narrow window running along the width of both the north and east elevations at eye level (from the interior). The doorway is topped by a rough-cut granite lintel as is the window at the west elevation where there is also a rough-cut granite sill. The narrow windows at the north and east elevations have interior panelled wood shutters and appear not to have been glazed at all. The entry contains a panelled wood door. No sash remains in the west window although it appears to have contained a wood double-hung sash. The structure is enclosed by an unusual roof system consisting of concrete trusses infilled with rows of purple glass cylinders. On the interior, the 1905 section has exposed brick and rough-plastered walls, a concrete floor, and the exposed ceiling system just described. The door and window openings are framed by molded wood trim.

The 1909 addition had an L-shaped plan (see sketch map for dimensions). It was built using the Sewell method of construction. This technique uses cement plaster over steel mesh on a wood or steel frame. These buildings had concrete foundations and the unpainted exterior took on a cream or light tan color. According to the original plans, the addition was enclosed by a very shallow pitched roof. If it was like other similar structures at the fort, the roof was finished with tar & gravel. The addition was partitioned into five rooms. There were two entries to the addition, one at the both the east and west elevations. According to plans, these entries contained wood doors with 9 glazed panes above three rectangular wood panels. Remaining fenestration on the addition consisted of seven windows facing east, four facing south, one facing north, and seven facing west. According to the original plans, these windows contained 6/6 double-hung wood sash. Due to the severely deteriorated condition of the addition, original interior finishes cannot be determined. Based on other buildings of the same style and type, the interior most likely had hardwood floors and rough plaster floors and ceilings. Window and doors were probably framed by molded wood trim.

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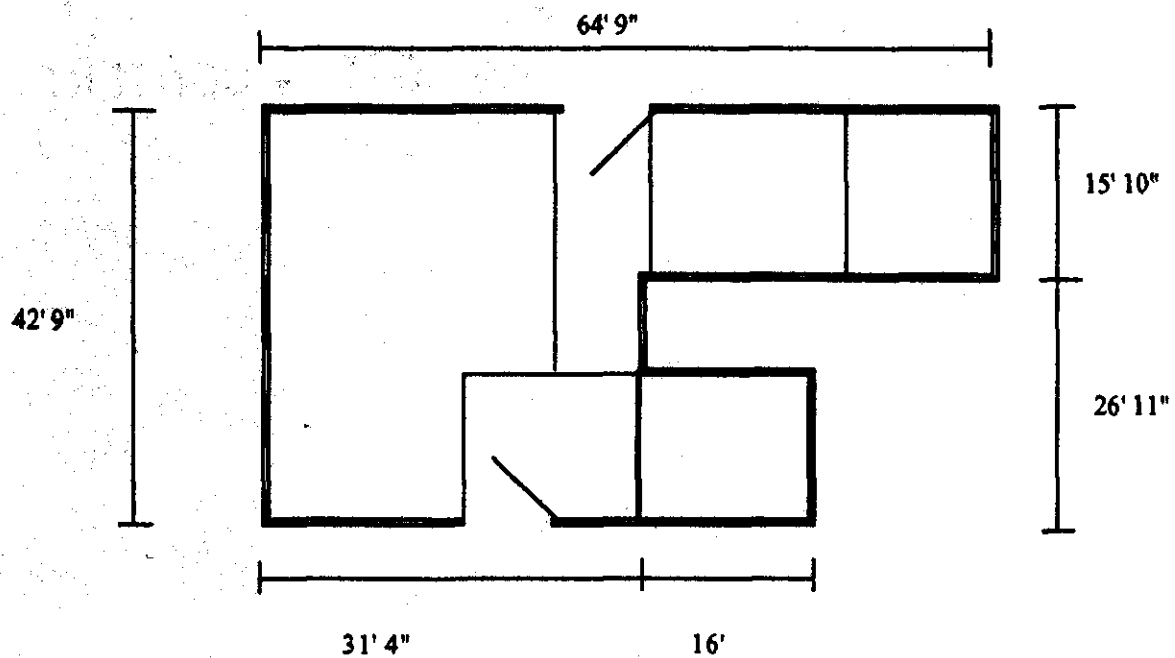
## **HISTORICAL BACKGROUND**

Establishment of Fort McKinley was part of a larger effort by the government to provide strategic harbor defenses throughout the country, a practice begun in the late eighteenth century. Fort McKinley was the largest of four new fortifications established to protect the many avenues of entry into Portland Harbor at the turn-of-the-century. It was situated to deter entrance into the harbor from the north, particularly by way of Hussey Sound and Broad Sound. Plans for Fort McKinley included construction of nine gun batteries and facilities to mine the two major channels. To help control and monitor the firing of the guns, each battery had an observation station constructed nearby. These stations provided both range and directional information to the batteries. The Battery Weymouth Combined Observation Station is one of five such stations built at Fort McKinley in 1905 (two others were built in 1908). This station served nearby Battery Weymouth which held three 8 inch breechloading rifles mounted on disappearing carriages.

In 1905, under President Theodore Roosevelt, a board was appointed to evaluate the country's defenses. The Taft Board, headed by Secretary of War William H. Taft, made recommendations to improve the existing system for controlling the guns and mines. Rather than sighting guns directly, the board proposed to use a sophisticated observation system with optical instruments in the observation stations. Sightings would be sent by telephone into plotting rooms where the data was processed. In turn, ranges and directions were sent to the batteries. In response to the Taft Board recommendations, an addition was constructed onto Battery Weymouth Combined Observation Station to supplement the existing operating room. The addition, the largest of the additions to the various observation stations, included two plotting rooms (east and west central rooms), an officers room (southeast corner room), a dormitory (southwest room), and an observing room (northwest corner room).

During WWII the Navy also established a strong presence in Portland Harbor, sharing responsibility for defense of the area with the Army. The Navy undertook a number of measures to supplement the work of the Army, including rigging submarine nets and sinking old ships between the islands and the mainland to completely enclose the harbor. By doing this, the batteries and mine casemates on the north and east shores of Fort McKinley were rendered superfluous. Consequently, only one battery at Fort McKinley needed to be manned. By 1943, as the threat of a major attack became unlikely, build-up of the coastal defenses greatly diminished and were virtually halted by 1940. Experiences during WWII, such as amphibious landings, air strikes, and the development of nuclear weapons and missiles all contributed to making harbor defenses like Fort McKinley obsolete. In 1950 the Coast Artillery was dissolved, the U.S. Army harbor defense commands were disbanded, and the forts were abandoned.

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Battery Weymouth Combined Observation Station  
Floor Plan  
[not to scale]

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Battery Weymouth Combined Observation Station  
Original Plan at National Archives (file no. DR 10-79-49)

